# **Troubleshoot StarOS DNS Client Errors**

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#### Introduction

This document describes the details of the Domain Name System (DNS) failure codes that are printed in the Syslogs when the DNS-Client feature is enabled on StarOS.

#### **Problem**

StarOS DNS Client prints Syslog messages with fail-reason codes when it encounters issues with the DNS queries. These Syslog messages mostly contain response error-codes. Understanding these error-codes can help you troubleshoot the DNS issues.

#### Sample DNS Client related Syslog messages from StarOS

Here are a few sample Syslog messages that show various fail-reason codes.

```
[diameter-dns 92604 error] [3/1/44451 <diamproxy:20> er_dns_client.c:2938] [software internal security system syslog] Diameter DNS: response received with failreason: 4. Query: servername.dcca.example.com

[diameter-dns 92604 error] [3/1/44451 <diamproxy:49> er_dns_client.c:2938] [software internal security system syslog] Diameter DNS: response received with failreason: 11. Query: servername.dcca.example.com

[diameter-dns 92604 error] [3/1/44451 <diamproxy:31> er_dns_client.c:2938] [software internal security system syslog] Diameter DNS: response received with failreason: 12. Query: servername.dcca.example.com
```

### **Solution**

This table provides an explanation of the fail-reason code that can be used to narrow down the problem and troubleshoot the issue further. Usually, the Syslog message states whether the failure is related to a message received or an internal issue with the DNS Client.

Fail-Reason Code	Details
1	No relevant answer for the record type
2	Unable to interpret the request. Format Error
3	Server internal failure

4	DNS record does not exist
5	Opcode not supported
6	Server refused to perform the operation
11	Connection Refused
12	DNS query timed out
128	DNS query depth exceeded

**Note**: The StarOS Fail-Reason codes are different from the DNS Response RCODE values listed in RFC-6895

## **Related Information**

• Cisco PGW Configuration Guide